UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,129	09/30/2003	Pierre-Jean Reissman	13768.783.108	3890

47973 7590 03/20/2007
WORKMAN NYDEGGER/MICROSOFT
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UT 84111

EXAMINER	
DAO, THUY CHAN	
ART UNIT	**PAPER NUMBER**
2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/677,129	REISSMAN ET AL.	
	Examiner	Art Unit	
	Thuy Dao	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _03_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _36-46_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the amendment filed on January 10, 2007.

2. Claims 36-46 have been examined.

Response to Amendments

3. Per Applicants' request, claims 1-35 have been canceled and new claims 36-46 have been added.

4. The objection to the specification is withdrawn in view of Applicants' amendments.

5. The 35 USC §101 rejection over claims 31-34 is withdrawn in view of Applicants' amendments.

Response to Arguments

6. The Applicants are thanked for a thorough reply. Applicants' arguments have been considered but are moot in view of the new grounds of rejection – see paragraphs 8 and 9.

Claim Rejections – 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 36-46 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 7,165,074 to Avvari et al. (art made of record, hereinafter "Avvari '074").

Claim 36 (new):

Avvari '074 discloses a physical computer readable medium and *a method of tracking differences between software builds of a software product* (e.g., col.3: 4-34), *the method comprising:*

scanning a first binary software build of a software product to automatically discover classes in the first binary software build (e.g., FIG. 2, blocks 104-114-118, col.7: 14-28, a first binary software build as the Profiled Java Executable 104);

discovering dependencies of the discovered classes (e.g., col.7: 18-21, discovering dependencies to form a call tree as Coverage Data 118);

storing a first dictionary data structure including the discovered classes with their corresponding discovered dependencies (e.g., FIG. 2, blocks 118-116-102, col.7: 18-28, storing Coverage Data 118 in Database 102);

comparing the first dictionary data structure with a second dictionary data structure, the second dictionary data structure including classes organized with their dependencies of a second binary software build of the software product by comparing classes and dependencies set forth in the first and second dictionary data structures (e.g., col.5: 3-16, comparing an updated call tree with a corresponding existing call tree; FIG. 11, col.12: 49-62; col.7: 29-55, Data Analyzer 112a comparing with a second dictionary data structure from modification to the source code 103 to produce Dependency Test List 111a); *and*

providing an indication of differences between the first and second binary software builds (e.g., FIG. 2, col.&; 42-60, from Dependency Test List 111a, Data Optimizer 112b generates Precision Test List 111b and Output 115 to indicate negative effects from said modification to the source code 103).

Claim 37 (new):

The rejection of claim 36 is incorporated. Avvari also discloses *discovering classes comprises: (a) loading configuration information for the first binary software build; (b) identifying a class of the first software build; (c) creating an instance of the identified class; and (d) repeating acts (b) and (c) for other classes in the first binary software build* (e.g., FIG. 7A, col.11: 8-67).

Claim 38 (new):

The rejection of claim 37 is incorporated. Avvari also discloses *loading configuration information for the first binary software build comprises loading default configuration information* (e.g., col.8: 66 – col.9: 21).

Claim 39 (new):

The rejection of claim 37 is incorporated. Avvari also discloses *loading configuration information for the first binary software build comprises loading additional configuration information* (e.g., col.8: 29-38).

Claim 40 (new):

The rejection of claim 37 is incorporated. Avvari also discloses *creating an instance of the identified class comprises checking to see if a factory is defined for the class* (e.g., FIG. 7B-C, col.11: 8-67).

Claim 41 (new):

The rejection of claim 36 is incorporated. Avvari also discloses *discovering dependencies of the discovered classes comprises exploring the class to determine if there are any constructors, properties, attributes or methods for the class* (e.g., FIG. 7A, col.11: 8-67).

Claim 42 (new):

The rejection of claim 41 is incorporated. Avvari also discloses *if there are any constructors, properties, attributes or methods for the class, storing the constructors, properties, attributes or methods for the class in a temporary structure in preparation for storing in the first dictionary data structure* (e.g., FIG. 2, col.7: 14-60).

Claim 43 (new):

The rejection of claim 36 is incorporated. Avvari also discloses *providing an indication of differences between the first and second binary software builds comprises providing a delta which indicates entries that have been added or deleted between the first dictionary data structure and the second dictionary data structure* (e.g., FIG. 10, col.12: 15-29).

Claim 44 (new):

The rejection of claim 36 is incorporated. Avvari also discloses *displaying a tree representation of the dictionary data structure that can be used to determine if any classes have been modified* (e.g., FIG. 7A-C, col.11; 8-67).

Claim 45 (new):

The rejection of claim 36 is incorporated. Avvari also discloses *receiving user input for loading constructors to specific classes for increasing code coverage testing for changes between the first software build and the second software build* (e.g., FIG. 10, col.12: 15-29).

Claim 46 (new):

Claim 46 is a physical computer readable medium, which recites the same limitations as those of claim 36, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 46.

9. Claims 36 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,978,401 to Avvari et al. (art made of record, hereinafter "Avvari '401").

Claim 36 (new):

Avvari '401 discloses a physical computer readable medium and *a method of tracking differences between software builds of a software product* (e.g., FIG. 2, col.7: 1-42), *the method comprising:*

scanning a first binary software build of a software product to automatically discover classes in the first binary software build (e.g., FIG.12A, blocks 1202-1204, col.13: 5-13);

discovering dependencies of the discovered classes (e.g., FIG. 12A, block 1206, col.13: 13-15);

storing a first dictionary data structure including the discovered classes with their corresponding discovered dependencies (e.g., FIG. 12A, block 1208, col.13: 15-18);

comparing the first dictionary data structure with a second dictionary data structure, the second dictionary data structure including classes organized with their dependencies of a second binary software build of the software product by comparing classes and dependencies set forth in the first and second dictionary data structures (e.g., FIG. 12A, block 1210, col.13: 18-21); *and*

providing an indication of differences between the first and second binary software builds (e.g., FIG. 12A, block 1212 → YES/NO, col.13: 22-64).

Claim 46 (new):

Claim 46 is a physical computer readable medium, which recites the same limitations as those of claim 36, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 46.

Conclusion

10. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao

TUAN DAM
SUPERVISORY PATENT EXAMINER